Title (en)

METHOD FOR PREDICTING GEOLOGICAL FEATURES FROM THIN SECTION IMAGES USING A DEEP LEARNING CLASSIFICATION PROCESS

Title (de)

VERFAHREN ZUR VORHERSAGE VON GEOLOGISCHEN MERKMALEN AUS DÜNNSCHNITTBILDERN UNTER VERWENDUNG EINES TIEFENLERNKLASSIFIZIERUNGSVERFAHRENS

Title (fr)

PROCÉDÉ DE PRÉDICTION DE CARACTÉRISTIQUES GÉOLOGIQUES À PARTIR D'IMAGES À SECTION MINCE AU MOYEN D'UN PROCESSUS DE CLASSIFICATION À APPRENTISSAGE PROFOND

Publication

EP 4338134 A1 20240320 (EN)

Application

EP 22728111 A 20220505

Priority

- US 202163187144 P 20210511
- EP 2022062162 W 20220505

Abstract (en)

[origin: WO2022238232A1] A method for predicting an occurrence of a geological feature in a geologic thin section image uses a backpropagation-enabled classification process trained by inputting extracted training image fractions having substantially the same absolute horizontal and vertical length and associated labels for classes from a predetermined set of geological features, and iteratively computing a prediction of the probability of occurrence of each of the classes for the extracted training image fractions. The trained backpropagation-enabled classification model is used to predict the occurrence of the classes in extracted fractions of non-training geologic thin section images having substantially the same absolute horizontal and vertical length as the training image fractions.

IPC 8 full level

G06V 10/25 (2022.01); **G06V 10/82** (2022.01); **G06V 20/69** (2022.01)

CPC (source: EP US)

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